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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,490	07/02/2003	Chin-Kun Hsieh	B-5145 621064-5	4445

36716 7590 05/03/2005

LADAS & PARRY  
5670 WILSHIRE BOULEVARD, SUITE 2100  
LOS ANGELES, CA 90036-5679

EXAMINER

TRUONG, BAO Q

ART UNIT PAPER NUMBER

2875

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/613,490

Applicant(s)

HSIEH ET AL.

Examiner

Bao Q. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "*height of the third reflecting protrusions is greater than the distance between the illumination tube and the first reflective protrusion*" of claims 17, 18, 19 and 22 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no description of the "*height of the third reflecting protrusions is greater than the distance between the illumination tube and the first reflective protrusion*" of claims 17, 18, 19 and 22 in the specification. Note: 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figueroa [US 5,192,129] in view of Azuma [US 5,161,880].

Regarding claims 1, 9, 13 and 20, Figueroa discloses a direct backlight module having a reflecting plate [10], a first triangular protrusion [27B], a plurality of second reflecting portions/planar surfaces [12a], a plurality of third reflecting portions/triangular protrusions/second triangular protrusion [21<sub>2a</sub>, 15<sub>2a</sub>], and an illumination tube [1] emitting light toward the reflecting plate [10] and an opposite opening (figures 1-6). Figueroa does not disclose the diffuser.

Azuma discloses a diffuser [27] covering an opening of a reflector plate [24] to diffuse light (figures 3-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the direct backlight module of Figueroa with the diffuser as taught by Azuma at the opposite opening of the reflecting plate to diffuse light for purpose of providing a uniform light distribution.

Regarding claims 2, 10, 14 and 21, Figueroa discloses a height of the third reflecting portions/triangular protrusions/second triangular protrusion [21<sub>2a</sub>, 15<sub>2a</sub>] being greater than that of the first triangular [27B] (figure 3).

Regarding claims 3 and 25, Figueroa discloses the first reflecting portion [27B, 76] being a curved surface (figure 6).

Regarding claims 4 and 23, Figueroa discloses a first triangular protrusion [27B] (figure 3).

Regarding claim 5, Figueroa discloses a planar surface [12a] (figure 3).

Regarding claims 6 and 24, Figueroa discloses a third triangular protrusion [21<sub>2a</sub>, 15<sub>2a</sub>] (figure 3).

Regarding claims 7, 11 and 15, Azuma discloses a prism [28] (figures 3-4).

Regarding claims 8, 12 and 16, Azuma a diffusing plate [30] (figures 3-4).

Regarding claims 17-19 and 22, Figueroa discloses a height of the third reflecting portions/triangular protrusions/second triangular protrusion [21<sub>2a</sub>, 15<sub>2a</sub>] being greater than the distance between the illumination tube and the first reflective protrusion (figure 3).

### ***Response to Arguments***

6. Applicant's arguments and amendments of new claims 17-25 filed 28 February 2005 have been fully considered but they are not persuasive.

Claims 1, 9 and 13, the applicant recites that Figueroa and Azuma do not disclose "...wherein light beams from the illumination tube enter the diffuser directly and through reflections from the first reflecting portion, the second reflecting portions and the third reflecting portions". However, Figueroa and Azuma disclose light beams from the illumination tube [1] enter the diffuser directly through the opposite opening of the reflecting plate [10], and through reflections from the reflecting plate [10] (figures 1-3 of Figueroa and figures 3-4 of Azuma).

In view of all above, claims 1-25 are unpatentable.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (571) 272-2383. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

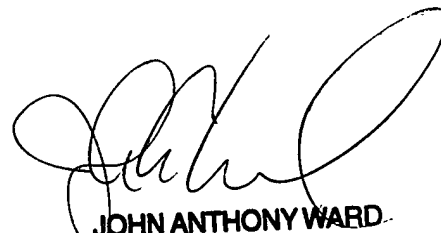
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Q. Truong  
Examiner  
Art Unit 2875



**JOHN ANTHONY WARD**  
**PRIMARY EXAMINER**